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Bringing Connections Onboard

Green, Colin P.; Homroy, Swarnodeep

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Bringing Connections Onboard: The Value of Political Influence

November 2018

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Research Institute SOM
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Visiting address:
Nettelbosje 2
9747 AE Groningen
The Netherlands

Postal address:
P.O. Box 800
9700 AV Groningen
The Netherlands

T +31 50 363 7068/3815

www.rug.nl/feb/research



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Colin P. Green
Norwegian University of Science and Technology

Swarnodeep Homroy
University of Groningen, Faculty of Economics and Business
s.homroy@rug.nl

Bringing Connections Onboard: The Value of Political Influence

Colin P. Green and Swarnodeep Homroy*

November 1, 2018

Abstract

The active involvement of politicians in corporate decision-making is highly contentious. Jurisdictions differ markedly in the restrictions they place on current and prior elected representatives. This reflects a tension between the potential for ‘capture’ and allowing individuals with business skills and experience to be involved in political decision-making. We examine the effect on firm value of a change in parliamentary regulation in the U.K. that allowed members of parliament (MPs) with corporate board membership to participate in parliamentary debates on issues related to their corporate interests. Using this as a source of exogenous variation in the political value of these MPs, we find that firms with MPs on the board experienced positive abnormal returns around the event and the value of these firms increased. Firms with ex-MPs and other politically connected directors had no change in firm value in the same time-window. We also find decreases in political donations of politically connected firms after the change in regulation. Our results suggest that lobbying type concerns, rather than the value of political skills and experience, drive the desire for corporations to hire politicians on boards.

Keywords: Political Connections, Board of Directors, Firm value

Green: Department of Economics, Norwegian University of Science and Technology; Homroy: Department of Economics, Econometrics, and Finance, University of Groningen. *Corresponding Author

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* E-mail: s.homroy@rug.nl

1 Introduction

The interaction of the corporate sector and political representatives is controversial. There exist a range of concerns regarding the 'co-option' of politicians and large firms and that, as a result, elected representatives will not work in the best interests of their electorate. This has led to a range of restrictions aimed at reducing potential conflicts of interest. The arguments for allowing politicians to simultaneously hold corporate roles relate to attracting, or at least not excluding, highly productive individuals with business and leadership experience. Under this view, including people with relevant skills in corporate decision-making may be socially efficient. At the same time, this clearly has the potential to lower the barrier to corruption and cronyism. Political connections have been shown to lead to preferential treatment in a range of ways, including preferential access to government contracts, lower costs of bank loans, and lighter regulatory oversight (Shleifer and Vishny, 1994; Dinc, 2005; Khwaja and Mian, 2005; Houston et al. 2014). It is therefore not surprising that politically connected firms have been shown to be more prevalent in industries with a higher exposure to both government contracts and regulation (Agrawal and Knoeber, 2001).

This paper has two main aims. First, we examine politicians who have corporate ties in the form of directorships or consultancy roles to estimate the financial benefits, to firms, from politically connected boards in a low corruption environment. Although stylized results show that the benefits of political connection are more pronounced in countries with weak legal systems, recent papers show that even in developed economies political connections can affect firm outcomes (Amore and Bennedsen, 2013; Adelino and Dinc, 2014, Bertrand, et al. 2018). Second, we seek to disentangle whether these returns, if any, reflect factors such as lobbying and capture of the political decision-making function or the value of politician's knowledge and experience. To these ends, we use an exogenous

change in parliamentary regulations in the United Kingdom. The UK provides an interesting setting for estimating the value of political connections. Whilst it has strong legal protection and low corruption, 46% of the top 50 public firms have connections with a minister or an MP, and connected firms form 39% of the market capitalization (Faccio, 2006; Faccio, Masulis, and McConnell, 2006).¹

In the UK, while sitting Members of Parliament (MPs) are legally entitled to hold outside jobs, there have been a range of specific restrictions related to the parliamentary activities of MPs in the House of Commons who held directorships on corporate boards. For instance, on November 6, 1995, the UK parliament passed a resolution that MPs may, not themselves, or urge other members to, advocate or initiate any matter on behalf of an outside body or individual with whom the MP has a financial relationship. This regulation did not prevent a member from being appointed as a director on corporate boards or take up consultancy roles, but it prohibited paid advocacy. Amongst other things, this *de-facto* restricted MPs who were on corporate boards from sitting on parliamentary committees that were concerned with areas of public policy that could reasonably be related to the activities of the corporation in which they have business interests.

We use a change in regulation whereby with effect from the 14th of May 2002, MPs with outside business interests can initiate parliamentary proceedings on issues that are related to their registered outside interests to estimate the value of political connections.² The amendment presents a setting akin to a natural experiment whereby existing MP-directors were in a better position to provide benefit to the firm. If the market values

¹ In comparison, the figures for the US are 6% and 4%, respectively. In fact, only Russia and Thailand are found to have a higher fraction of the market capitalization of connected firms.

² Initiating parliamentary proceedings include presenting a bill, presenting a petition, tabling and asking parliamentary questions, seeking to initiate an adjournment (or other) debates, tabling or moving any motion and amendment to a bill, proposing a draft report, or moving an amendment to a draft report, in a select committee, etc.

political connections, then the subset of firms with MP-directors will have positive abnormal returns around the announcement of this amendment whilst the subset of firms with no MP-directors shall see no, or even a negative change. The difference (abnormal returns) in difference (between the firms with MP-directors, and those without) around the announcement date provides an estimate of the effect of political connections on firm value.

Our research fits into a growing body of literature examining the corporate wealth effects of political connections. For instance, Faccio and Parsley (2009) demonstrate how unexpected deaths of politicians lead to a fall in value for firms headquartered in a given politician’s hometown. While Fisman (2001) find that Indonesian firms connected to the Suharto family decreased in firm value following bad news about the health of President Suharto. While these results indicate the value-effect of politically connected firms, they may be difficult to generalize as they are based on either an isolated or a small number of events, often related to one politician. Moreover, these papers do not distinguish between the channels through which this value-effect might operate. In contrast, our setting is advantageous to examine the value effects for connected and unconnected firms at the time of an exogenous regulation change and provide evidence on the channel through which political connections can affect firm value.

Further, our setting allows us to examine whether there is a market for political capital. Vidal, Draca, and Fons-Rosen (2012) find a 24% drop in the revenue of lobbyists when the politician they are connected to leaves the Senate. In our setting, we examine if the increase in the political value of individual MPs makes them more attractive in the market for corporate directors and consultants. We use data-mining techniques to aggregate information on historical parliamentary committee compositions from the publication archives of the UK parliament. This allows us to compare the relative likelihood of

members of the parliamentary committees to get a first-time corporate affiliation after the reform, with respect to the non-members.

Our main result is that firms with Members of Parliament as directors or consultants experienced substantial increases in financial returns following the introduction of this legislation. This evidence comes from two complementary identification approaches. First, we use a financial event study approach and demonstrate a statistically significant increase in abnormal returns for connected firms in the 3 days $[-1, +1]$ and 7 days $[-3, +3]$ time windows around 14th of May 2002.³ These returns are also economically meaningful: politically connected firms experience a value increase of approximately 8% compared to unconnected firms. Second, we use a conventional difference in difference approach comparing firms with political connections to those without. This again demonstrates a marked increase in firm profitability for connected firms in the one-year period following the legislative change, these are similar in magnitude to the event study events. These results are consistent with the argument that firms benefit from appointing politicians on corporate boards who are directly involved in political decision-making.

While the relationship between political connections and firm valuation is interesting, it does not provide any information, *per se*, regarding whether it is socially desirable. As discussed earlier, these returns could reflect returns to influence or the additional expertise brought to the board by individuals who are also valuable in political decision making. Hence, the second main thrust of our paper is to provide evidence aimed at distinguishing between these two channels. Our main estimates go some way towards this as they should be net of existing returns to information or expertise. These should already

³ It can be argued that such regulations are not entirely exogenous and there are some expectations leading to the day of the event. If that is the case, then the regulation change will be priced in the securities of the affected firms and will lead to a conservative bias in our estimates. In the empirical analysis we examine the robustness of our results to announcement and anticipation effects.

be priced into financial returns of connected firms, and already influence profitability of these firms. We further examine whether there may have been a general increase in the value of political expertise over our period of analysis. We examine firms with politicians on board unaffected by the legislative change. This includes, ex-MPs, Members of the European Parliament (MEPs), and other non-MP politicians. We find no evidence that these firms experienced an increase in returns or value as a result of the legislation.

With this in mind, our final contribution is to examine how firms react to the amendment. If the change in legislation leads to an increase in the value of political connections, firms should change their behavior accordingly. Was there an increase in the likelihood of new corporate directorships or consultancy roles of MPs after the regulation? It is reasonable to expect an increased demand to appoint sitting MPs, one that is particularly large with respect to MPs with positions on key political committees. We demonstrate that MPs with and without prior corporate affiliations were both more likely to gain a first appointment on corporate boards or consultancy roles following the regulation change. However, we find no statistically significant difference in corporate appointments for members of parliamentary committees related to environmental affairs, and science and technology. Related to this, we demonstrate that valuation responses to these appointments are substantially larger post-reform. Again, we contrast this to the rate of appointment of other politicians, and ex-politicians, who arguably should have similar expertise, but for whom the amendment does not change their value to the corporate world. We find no evidence that their likelihood of being appointed to a corporate board is affected by the legislative change. Firms face other means of gaining political influence beyond the direct appointment of politician directors or use of MPs as consultants. We explore substitution from another influence generating behavior, political donations, as a result of the legislation change. Politically connected firms reduce their donations post

reform. Together, this paints a picture of returns to political connections that likely reflect influence.

The rest of the paper unfolds as follows: sections 2 and 3 provides brief summaries of related literature and the data, section 4 discusses the preliminary results, and section 5 concludes.

2 Background

The political connections of firms may take a range of forms, from passive connections such as those based on the voting districts of politicians to more active connections from campaign donations, lobbying, and appointment of politicians on corporate boards or as advisers to firms. Firms may benefit from such connections in various ways. Benefits could take the form of preferential access to credit Khwaja and Mian (2005), increased likelihood of receiving government contracts and lower probability of being detected for fraud (Goldman, Rocholl and So, 2009; Yu and Yu, 2011; Duchin, and Sosyura, 2012), and better access to government bailouts (Faccio, Masulis and McConnell, 2006).

These studies focus on two forms of political connections: political donations by firms, and explicit connection of firms to a politician. Roberts (1990) find a decline in value of firms following the death of Senator Henry Jackson that contributed to his presidential campaigns. Similar positive (negative) value effects are reported for firms connected to Democratic (Republican) candidates following Senator James Jeffords' decision to leave the Republican party Jayachandran (2006). A Republican win in the US presidential elections of 2000 led to an increase in the value of firms connected to the Republican party through political donations Goldman, Rocholl, and So (2009). The value of political

donations is particularly strong for firms based in the same state of the serving politicians (Cooper, Gulen and Ovtchinnikov, 2010).

Direct connections to politicians are arguably more durable than one-off contributions to political campaigns (Faccio, 2006). For a cross-section of firms drawn from 47 countries, she shows that direct political connections through corporate directors or large shareholders are valuable, particularly in institutional settings with poor legal protection and high corruption. Using sudden death of legislators as an exogenous shock to political connections, Faccio and Parsley (2009) show a decline in the value of the politically connected firms following the unexpected deaths.

The theoretical underpinning of the relationship of political connection and firm value is that firms benefit from reducing the uncertainty in their information and operating environment, of which the government is a major source. One way for a firm to reduce this uncertainty is to appoint a politician on the board of directors. From a resource dependence perspective, the board of directors are the conduits of information and linkages to the firm's external environment. Therefore, political appointments on the corporate boards are likely to be of benefit to the firm in mitigating uncertainties. These benefits can stem from the advice and counsel of the politicians on regulations and compliance, or from the influence and preferential treatment for the connected firms. The social welfare implications will be opposite, depending on whether the former or the latter channel dominates.

There are a number of challenges to causal interpretation of the value effect of political connection. First, politicians are likely to be more inclined to accept directorships at better performing and/or large firms. In a similar vein, while politicians who are better

placed to influence public policy are more likely to be appointed as directors the opportunity cost of their time is higher and hence may be less likely to accept outside jobs (Besley, 2004). Therefore, it is econometrically challenging to identify the mechanisms through which political connections can affect firm outcomes.

Our approach to disentangling these effects is to examine an exogenous change in the British parliamentary regulations on the conduct of the Members of Parliament. A committee on Standards in Public Life⁴ has been a feature of the British parliamentary democracy since 1995. The role of this committee is to review and recommend changes to the code of conduct for the members of parliament including arrangements relating to extra-parliamentary commercial and financial activities of individual members. In December 2001, the committee announced a new review of the code of conduct for the members of the House of Commons. On 22nd February 2002, the committee published a consultation paper setting out the areas of focus. The paper was circulated widely between both houses of the parliament, the members of the Scottish Parliament, Members of the Northern Irish Assembly and the National Assembly of Wales. The consultation paper was published on the committee's website, advertised in selected local and national publications, circulated among a number of academics, political commentators, and interested members of the public. In the month of May, eight full days of public hearing on the report was organized in London and Edinburgh.

The committee recommended that the ban on paid advocacy be upheld, but the arrangements put in place in 1995 relating to the initiation of the parliamentary proceedings were unduly harsh.⁵ The committee noted that by disallowing members of parliament

⁴ The term public life includes ministers, civil servants and advisers; Members of Parliament and UK members of the European Parliament, and various public bodies like the NHS.

⁵ Please see the detailed report here: https://publicofficialsfinancialdisclosure.worldbank.org/sites/fdl/files/assets/law-library-files/United%20Kingdom_Guide%20to%20Rules%20relating%20to%20MPs%20conduct_2009%20amended%202010_en.pdf

with outside interests to initiate parliamentary proceedings lead to their experience and expertise not being effectively used in making policy decisions. In view of these recommendations, the amendment of 14 May 2002 removed the prohibition on MPs with outside business interests to initiate and participate in parliamentary affairs that are directly related to their business interests. Under the new regulations, advocacy by MPs with outside commercial interests is prohibited which seeks to confer benefit exclusively upon a body (or individual) outside Parliament, with which the Member has a commercial connection. Otherwise, a Member can speak freely on matters that relate to the affairs and interests of a body (or individual) from which he or she receives a financial benefit, provided the benefit is properly registered and declared. See figure 1 for a timeline of the key events related to this legislation.

[Figure 1 around here]

This change in the code of conduct enhanced the influence of the MPs with corporate affiliation in parliamentary affairs. Even though paid advocacy was still banned, the MPs could now represent the issues of the firms they are connected to in parliamentary debates more effectively after the change in regulations. This is an exogenous shock to the value of the political connection to firms. It doesn't, however, affect the expertise of the politicians in the corporate affairs. Therefore, any change in the value of politically connected firms around the regulation change are likely to reflect how the market values political connection of firms.

3 Data

The primary sample used for this study is the set of firms featured in the FTSE 350 listings as of 2002, and we follow them for the period 2000-2004. We collect information

from *BoardEx* on board composition, experience and backgrounds of individual directors, which are updated annually. Financial information is obtained from DataStream. Our main analysis uses stock price information for the period 10/05/2002-18/05/2002. We exclude from our sample observations where firms do not feature in the FTSE 350 for at least two years after our event of interest or do not have the full set of board characteristics and financial data available. This constraint restricts our sample to 338 firms. We obtain financial data for these firms from Datastream.

We construct our measure of political connection using information from two main sources. We begin with information on board composition obtained from BoardEx. The directors with political backgrounds are likely to be non-executives. We undertake a series of matching exercises to identify a politician on the board of FTSE 350 firms. BoardEx reports the main occupation for every non-executive directors in providing information on current and historic non-board roles. We adopt a text mining approach to identify non-executives whose non-board employment is coded as “Government”, “UK Ministry of...”, “UK Home Office”, etc. We also search for titles of non-executive directors. We include members of both the first chamber (House of Commons) and the second chamber (House of Lords). The politically related titles for members of the lower house are ‘Right Honourable’, which identifies a member of the cabinet and ‘Honourable’, which identifies a non-cabinet member of the House of Commons. The political titles for the second chamber are ‘Lord’ and ‘Baroness’.⁶

We then match this with the list of MPs published in the UK Parliament website. In 2002, there were a total of 659 members in the House of Commons and 690 members in the House of Lords. Next, we use the listings of outside interests listed in the Register of

⁶ Lord titles are awarded for achievement in the political sphere, but can sometimes be inherited. Only two hereditary peers had a corporate directorships and/or consulting roles in 2002. We exclude them from our sample.

Members' Financial Interests in the UK parliament's website to obtain information on the paid outside positions of the MPs. In particular, we focus on the MPs with paid director and consultant positions on corporate boards. This information, in conjunction with the BoardEx data on Director Employment helps us locate the firms that were connected to at least one MP in the year 2002. In the final sample, we have 203 MPs with paid positions as directors or consultants.

We also identify 187 other non-MP politicians connected to our sample firms: 73 are MEPs, 66 are ex-MPs, and 48 are members of the Scottish Parliament and the Welsh Assembly.⁷ 53% of our sample firms have at least one politician on the board, with the mean firm having 0.6 MPs on the board. Politicians from the Conservative Party were more likely to have an outside business interest: 209 to 113 from the Labour party. We present this in figure 2.

[Figure 2 near here]

We gather information on the composition of parliamentary sub-committees focused on specific sectors. In particular, we focus on the sub-committees through which firms are more likely to benefit. We focus on key committees that are directly related to government contracts and regulatory affairs. These are the Defense Committee, Economic Affairs Committee, Environmental Audit Committee, International Trade Committee, and Science and Technology Committees. We use data-mining techniques to extract historical committee compositions from the archives of the publications of the UK parliament.⁸

⁷ The appointment of politicians on board are sometimes referred to as Special Consultants. These roles, like that of the directors, are reappointed annually. In our analysis, we do not distinguish between these two types of appointments. We discuss the robustness of our results to this classification in later sections.

⁸ The codes for the data-extraction are made publicly available through the authors' websites.

Finally, we collect information on political donations to the major political parties for the years 2001 to 2003 from the Electoral Commission database that records donations made to political parties by individuals, trade unions, firms and other donors. Within the sample period, we have about 2,400 donations made totaling to £44 million.⁹ We only consider donations that are reported to be made by "Companies", "Trusts" and "Building Societies".¹⁰

The summary statistics are tabulated in Appendix Table A1. We begin our analysis with univariate comparisons of firms with and without an MP on their board in the year 2002. Firms with MPs as directors are on average larger and have more profitable. Politically connected firms also seem to have a marginally higher proportion of independent directors. These differences indicate possible endogeneity in firm performance and political connections. We discuss in detail below our approach to circumvent this endogeneity problem.

4 Methodology

Our starting point is to estimate the value-effect of corporate political connections by making use of the regulatory change. To do that, we run an event study around the announcement of the change. At the time of the announcement, a subset of our sample firms had an MP on the board of directors. If the value of the political connection is through the expertise of the MP-directors, it will be priced in and there will be no effect on the cumulative abnormal return (CAR). However, if influence drives the value of

⁹ The year 2001 was the year of a general election in the UK, which may lead to bunching of political donations before the election. In our sample we include both pre-poll and post-poll donations for the year 2001.

¹⁰ It is possible that donations do not adequately capture the monetary transfers between firms and the parties. Disclosure of corporate loans and the terms of these loans to political parties has been widely debated in the UK in the lead up to the 2006 General Election. Unfortunately the disclosure requirements of political loans were not well formed during our sample period.

political connection, the news of the change in parliamentary regulation should be associated with a positive CAR. The abnormal returns are calculated based on a market model using the equal-weighted market portfolio. We use daily data from days -300 to -20 days prior to the event to estimate the parameters of the market model. We calculate the returns in 3-day, and 7-day windows and for the event day of 14th of May 2002:

$$\mathbf{R}_{i,t} = \mathbf{E}[\mathbf{R}_{i,t}|\mathbf{X}_t] + \boldsymbol{\xi}_{i,t} \quad (1)$$

where we decompose stock-returns $\mathbf{R}_{i,t}$ around the announcement of the regulatory change allowing MPs with board memberships to participate in parliamentary discussions around issues closely aligned to their corporate interests. \mathbf{X}_t is the conditioning vector of firm characteristics at time t and $\boldsymbol{\xi}_{i,t}$ is the abnormal returns within the event windows. In that sense, this represents a quasi-natural experiment where we compare the effect of an exogenous change in regulation on stock returns of affected firms to other unaffected firms. In figure 3, we present the abnormal returns for politically connected firms around the event date, with respect to the control group.

[Figure 3 around here]

As an alternative identification strategy we estimate difference in difference models of the form:

$$Y_{jt} = \alpha \textit{Connected}_{jt} + X_{jt}\boldsymbol{\beta} + \gamma_j + \delta_t + \varepsilon_{jt} \quad (2)$$

Where Y provides measures of financial performance of firm j for year t . γ_j and δ_t are firm and year fixed effects, X_{jt} are firm level controls. *Connected* is a dummy variable indicating that the observation is after the reform and the firm was politically connected

at the time of the reform. Hence α provides the difference in differences estimates of the conditional effect of the reform on profits of these connected firms. We use financial data of our sample firms for the period 2001-2003.

To further disentangle the influence and expertise motives of political connection, we provide estimates of (1) and (2) for firms with directors on their board with other forms of political connections (ex-MPs, members of the European Parliament, members of the Scottish Parliament and the Welsh Assembly, etc.) The parliamentary regulatory change does not affect the influence-value of these directors. Therefore, if the value of the political connection is driven by the influence motive, we should not see any statistically significant effect on either CAR or profitability.

In the next section, we explore a range of potential issues that may lead to the main estimates of interest from (1) and (2) not being reliable. Most notably, a standard concern with CAR estimates along the lines of (1) are timing effects. For instance, estimates may be biased towards zero if actors within the financial markets anticipated the announcement of the reform. While this would, in our case, lead to conservative estimates we explore issues of timing and related placebo tests. In a similar vein, a concern with (2) is that firms who anticipate the policy may act to appoint MPs earlier. The nomination of directors is a forward-looking process and the elections happen at the Annual General Meetings of companies that are held in spring (typically in March-May), which coincides with the change in regulation. There is no significant increase in the number of politically connected firms from 2001-2002, which partially mitigates the concern of anticipation effect in director recruitment. Nevertheless, we investigate issues of timing, and more general sensitivity of our results to how we classify our treatment group. A final issue is that if the value of politically connections increases post-reform than there will be endogenous switching into the treatment group. Our main approach holds treatment status

fixed at time of reform. Again, this should provide a conservative estimate of our parameter of interest.

We also examine how firms react to the reform. We focus on two types of behavior. First, we examine the likelihood of MPs being appointed as corporate directors in the 2 years following the regulation change, with the particular focus on the MPs serving on the parliamentary committees. If the value of the political capital of the MPs increases after the change, the demand for the MPs as corporate directors are also likely to increase. Finally, we examine potential substitution away from political donations by connected firms. We examine the change in political donations of politically connected firms before and after the reform with respect to the unconnected group.

5 Results

5.1 Effect of the changes in value of political connections on firm value

As a starting point, we compare the characteristics of firms with and without political connections. Political connections are defined based on having MPs as corporate directors and/or consultants as of the year 2001. We present the results in table 1. Politically connected firms are on average, larger, more profitable and have higher leverage. In addition, firms with a politically connected director or a consultant make less political donations. Connected firms also have marginally larger boards. There seems to be no statistically significant difference in the fraction of independent directors, the fraction of female directors, and accounting standards as proxied by having one of the ‘Big Four’ accounting firms as auditors. The univariate result suggest sorting in the market for politician-directors.

[Table 1 near here]

Table 2 presents our initial estimates of the value of political connections by calculating abnormal returns around the announcement of the change in parliamentary regulation on 14th of May, 2002 using the market model.¹¹ In panel A we present the results with equally weighted cumulative abnormal returns (CAR) and in panel B the CARs are weighted by the value of the companies. We estimate the difference in the CARs between politically connected firms and firms with no political connections. The difference in CAR is positive and significant in all the event windows and for all specifications, in both the equally weighted and value weighted CARs. The value effect here is comparable to the effect of appointing CEOs of other firms as executive directors and larger compared to the average announcement returns of non-executive director appointments (Fahlenbrach and Stulz, 2010; Perry and Peyer, 2005). We then estimate the difference in CARs for the firms with connections to non-MP politicians and firms with no political connections. There is no statistically significant price reaction for firms connected to non-MP politicians in our event windows. Finally, we examine the difference in CARs between firms connected to MPs from the Conservative Party and firms connected to MPs from other parties (Labour, Liberal-Democrats and Green Party). We find weak evidence that firms connected to Conservative Party MPs experience a higher price reaction in the event windows compared to firms connected to MPs from other parties.

[Table 2 around here]

We further examine the price reaction of politically connected firms controlling for firm characteristics. In multivariate tests with value-weighted CAR for (-3, +3) days as the dependent variable (expressed as a percentage), we control for several firm characteristics: the market-to-book ratio, firm size in terms of sales, volatility in daily stock returns

¹¹ We also test the robustness of our results using the Fama and French (1993) model.

and the leverage. The results are presented in table 3, where column 1 presents the baseline specification. In column 2, we control for the fact that the value of political connections is likely to be larger in certain industries where, for instance, the exposure to government contracts and regulations are higher. For firms in these industries, political connection can be both disproportionately likely and valuable. These industries are the Banking and Financial Services, Energy, Defense activities, Airlines and Spacecraft.¹² We add an indicator, *Industries with Exposure*, for any firm in the aforementioned industries. Further in column 3, we control for the heterogeneity in the nature of appointments that MPs have in UK firms. Some MPs are appointed as Directors whereas the others are appointed as a Consultant to the Board. We define politically connected firms to be only those, which have a MP as a non-executive director. This eliminates 76 politicians who were only employed as consultants, and the fraction of connected firms drop from 53% to 44%. Finally, in column 4 we test the cross-sectional value effects for firms with non-MP political connections.

The results show that companies with connections to MPs experience a significantly positive abnormal return following the change in parliamentary regulation on members' outside interests. The positive price reaction is not concentrated only in industries with high exposure to government contracts or regulations. The results are also economically meaningful: politically connected firms experience a 9% increase in value when they are connected to MPs, but no significant gain in value when the connection is with a non-MP politician.

[Table 3 near here]

¹² The results are robust to different choices of industry sub-samples. A complete list of the SIC codes used for this sub-sample analysis is available on the authors' websites.

Finally, we employ an alternative identification strategy to estimate the effect of this exogenous change in the value of political connection on market value (MTBV) and Total Shareholder Returns (TSR) and Return on Assets (ROA).¹³ We report the difference in difference estimates in table 4. We have a short panel of FTSE 350 firms from 2001-2003.¹⁴ Columns 1 and 2 report results for MTBV whilst columns 3 reports the result for ROA. In all the specifications, Political Connection equals 1 for all firms that were politically connected as of the year 2002. All other firms listed in the FTSE 350 form the control group. We report estimates with full set of firm-level controls and with firm-fixed effects, hence our parameter of interest provides the difference in difference estimate of the effect of the legislative change on firm value.¹⁵ Again, we find sizeable effects of the legislative change on firm value. For MTBV and TSR these are in the range of a 12% to 16% increase. For ROA the effect is of a similar magnitude but imprecisely estimated and not statistically significant at conventional levels.

[Table 4 around here]

5.2 Robustness and Placebo Tests

This section aims to examine the robustness of our results to a range of threats. One concern is that our results reflect some general increasing return to political expertise over the period. As an initial step to exploring this, we examine the effect of the regulatory change on firms who are politically connected but where the politician is not an MP. As the change in regulation only affects the political value of MPs at Westminster, the

¹³ If we use ROA as a measure of profitability, the difference in difference is statistically insignificant at the conventional levels. This is not unexpected as the accounting benefits accrue over a longer period of time.

¹⁴ The choice of the short panel for the difference-in-difference analysis is motivated by considerations of sample attrition. If political connections are valuable, the control group becomes endogenous over time.

¹⁵ Sample attrition from the control group can also explain the widening of the profitability gap between connected and unconnected firms. The better performing firms in the non-connected group are more likely to appoint an MP-director after the reform.

value of other politicians such as Members of the European Parliament (MEPs), ex-MPs and members of the Scottish Parliament and Welsh Assemblies should be unaffected.¹⁶ We estimate an analogous difference in difference model but comparing firms with non-MP politicians on the board relative to a comparison group of non-connected firms.

[Table 5 around here]

These results are reported in Table 5. There is no effect on firm profitability for these firms. Insofar as these, non-MP, politicians cannot influence the legislative policy at the UK Parliament that form the focus of the change in legislation, this suggests our prior results reflect the change in firm value due to the newly gained ability of MPs to either influence or gain information on law-making.

More generally, we undertake a range of checks aimed at examining the potential for our results to reflect other idiosyncratic trends and related confounding factors. First, we check for the number of appointments of politician directors in the 6-month period prior to the regulation. By doing this, we seek to examine if firms start to appoint more MPs in anticipation of this regulation between December 2001 when the review was first announced and the recommendations were finally adopted. In that period, nine firms announce the appointment of directors, all of which are re-appointments. Of the 28 reappointments in this period, only four are politicians, none of whom were MPs. Therefore, it does not seem that there is substantial political appointments in anticipation of the regulation.

¹⁶ Even though the recommendations of the Standards in Public Life broadly applies to the MEPs, members of Scottish Parliament, Welsh and Northern Irish Assemblies, the change in regulation on participation of Members in parliamentary procedures only applies to MPs in Westminster. The other politicians are bound by the regulations of the Houses and Assemblies they attend.

We check the robustness of our results to anticipation and other timing effects. First, we examine the change in value of connected firms around the publication of the Consulting paper (22/02/2002) and the public consultations in London and Edinburgh. The consultations happened from 01st May 2002-10th May 2002, and we estimated the effects in a $[-1,+1]$ window around 02/05/2002 and 08/05/2002.¹⁷ The results are presented in table 6. Whilst we find no price reaction around the public hearings, we find a positive price reaction, which is significant at 10% level, around the date of the publication of the Consulting paper. The price reaction is in the order of 0.5% for the connected firms. This provides some indication that investors may have had some prior knowledge of the recommendations of the committee. Notwithstanding this, we find positive value effects for connected firms when the recommendations were adopted. Our interpretation of this is that the results reported in table 3 may provide conservative estimates of the effect of the policy change on firm value.

[Table 6 around here]

In unreported results, we conducted a battery of robustness tests for reliability of the classification and the price effects. First, to ensure that we are capturing idiosyncratic trends in stock prices, we simulate the experiment for the ‘treated’ and the ‘control’ group for 100 randomly defined dates in the 24-months prior to the event and calculate the CAR for 3-day, 5-day and 10-day windows. We find no statistically significant value-effects in any of these time windows for the politically connected firms.

Further, we examine if the value of the effects varies by the party affiliation of the MPs. Specifically, we examine if the MPs of the Conservative party drive our results compared to MPs in the Lab our party. We find weak evidence that Conservative

¹⁷ Within the eight-day period of public hearings in London and Edinburgh, we choose two randomly selected days as the event dates. Our results are robust the choice of event days within the eight-day period.

party affiliation increases the value of political connection over connection to the Labour party. Finally, we examine the robustness of our baseline results using CARs adjusted by the Fama-French thirty-industry returns. Our results remain essentially unchanged if we use value-weighted and equal-weighted returns.

5.3 Mechanisms and Extensions

If the amendment of the parliamentary regulation on members outside interests increases the political value of the MP-directors, the demand for MP-directors is likely to increase in the post-event period. We investigate this in a number of ways.

First, we examine if firms appoint more MPs as directors or consultants in the post-event period. Related to this, we then examine the likelihood of MPs with no prior corporate affiliation gaining their first appointment as a director or consultant in the 24-month period following the reform. Finally, we examine if the market reaction to the nomination of MPs as directors differs in the pre- and the post-event period, compared to the announcement effects of other non-executive directors.

In a descriptive exercise, we find that firms on average do not increase the number of politicians on the board: the average number of politicians onboard is 0.6 both before and after the regulation). However, it is possible that there is displacement of other kinds of politicians by MPs, and that after the regulation; MPs are more in demand for corporate directorships.¹⁸

¹⁸ Firms can have other forms of political connections. For example, directors with social connections to MPs can be an indirect political connection. It is empirically difficult to investigate all possible indirect connections, but such channels will only be a source of attenuating bias for our results.

We further investigate the relative likelihoods of MPs who are members of the parliamentary sub-committees and those who are not to find a new corporate appointment after the reform. We find no difference in the likelihood of members of the parliamentary committees gaining a first-time corporate appointment compared to non-members. Although we expected the members of these committees to have a higher political capital, which will be more attractive in the market for political connections, a few factors can attenuate that effect. First, the MPs on parliamentary committees may have more binding constraints on their time, and hence less readily supply their political capital. Second, aside the change in the parliamentary regulation in question, MPs with outside corporate interests are no longer excluded from the parliamentary proceedings, and hence the possibility of non-members to become members of these committees are higher. Therefore, on average we see no difference in the likelihood of corporate appointments. We present these results in table 7.

[Table 7 near here]

A stylized result from finance literature is that there are stock price reactions to the appointment of non-executive directors on corporate boards (Defond et al., 2005; Fich and Shivdasani, 2006; Dass et al., 2014). To what extent does the announcement effects of politicians before and after the reform vary compared to other non-executive director appointments? We examine the announcement effects for MPs and other non-executive directors (including other politicians) in 2000-2001 and in the 2003-2004.¹⁹ We have 114 announcements of politician directors in 2000-2001 and 135 MP announcements in 2003-2004 period. The control group was a random selection of 100 other non-executive appointments in the same periods.²⁰ The results are presented in table 8. Whilst the stock

¹⁹ Unfortunately, data on board appointments prior to 2001 is not complete, and the exact dates are not systematically recorded.

²⁰ We exclude all announcements of multiple director appointments, or appointments surrounding a major event for the firm.

price reaction to the appointment of other non-executive directors are similar in 2001 and 2003, the announcement returns are higher for MPs in 2003 compared to 2001.

[Table 8 near here]

There are a number of non-mutually exclusive channels through which firms can seek to establish political connection. Our main emphasis has been the appointment of politicians and former politicians on the corporate board, but donations to political parties represents another potential channel. There is a mature literature on the political donations of firms and its executives (Goldman, Rocholl, and So, 2009; Cooper, Gulen and Ovtchinnikov, 2010) and the benefits that accrue to firms that make such donations. An open question in the literature is the relative importance of the two channels of investing in political capital, and how firms optimize over this choice set.

In our setting, after the withdrawal of the constraint of participation of MPs with outside interests in parliamentary proceedings, the value of political connection through board appointments should increase. This allows us to examine the relative dominance of these two forms of political connections, at least in the short term. We conduct a difference-in-difference analysis of the political donations of connected vs the unconnected firms from the year 2001 to 2003. We focus only on the short-term effect on donations because with time, there will be sample attrition from the unconnected group.

The results are presented in table 9 and shows that politically connected firms in the year of the regulation change decreased political donations in the year following the change of regulation. An average firm in our sample spends around GBP 25,000 on political donation annually; the reduction of 18% is equivalent to approximately 4,500 pounds a year. The implications of this result is two-fold. First, the two channels of political connections are substitutive. The exogenous increase in the value of political

connection through the politician directors leads to a drop in the political donations. Second, this result has implications for public policies that attempt to limit the involvement of elected politicians in corporate affairs. Most of these policies are focused on constraining the direct involvement of politicians on corporate boards. Our results will imply that such policies need to be balanced by regulations for transparent declaration of corporate political donations.

[Table 9 near here]

6 Conclusion

The ethics of politicians on corporate boards is a matter of ongoing public debate. On the one hand, politicians as directors can bring in valuable human capital and bridge the information gap between firm management and regulatory authorities. At the same time, firms can benefit through a range of activities that are unlikely to be in the broader social interest, including lobbying for government contracts, and support in weaker economic conditions, etc. In practice, it is difficult to disentangle these channels of effect due to factors such as endogenous selection in corporate board formation.

In this paper, we make use of a change in UK parliamentary regulations as a source of exogenous variation in the value of politician directors to examine how firms benefit from these connections. A key component of this legislative change was to remove the prohibition of MP directors from involvement in parliamentary committees that may relate to the business of the firm. We find that firms with existing MP Directors experienced both positive abnormal returns and increased firm profitability around this regulatory change. This, in itself, is suggestive of increasing returns to political influence, rather than, for instance, human capital based returns to political connections. We subsequently provide evidence increases in political appointment to corporate boards, increased market

valuation of these events, and reductions in political donations by firms as a result of the legislative reform. All suggest that this reform increased the value of political connections to firms. Under the assumption that the underlying human capital of connected-MPs is unlikely to have changed in this period, and estimates that show no changes in valuation or firm behavior for firms connected to non-MP politicians, these results suggest that political influence is a substantial component of the financial returns from political connections.

References

- Adelino, Manuel, and I. Serdar Dinc, 2014, Corporate distress and lobbying: Evidence from the stimulus act, *Journal of Financial Economics* 114, 256–272.
- Agrawal, Anup, and Charles R. Knoeber, 2001, Do Some Outside Directors Play a Political Role?, *The Journal of Law and Economics* 44, 179–198.
- Amore, Mario Daniele, and Morten Bennedsen, 2013, The value of local political connections in a low-corruption environment, *Journal of Financial Economics* 110, 387–402.
- Cooper, Michael J., Huseyin Gulen, And Alexei V. Ovtchinnikov, 2010, Corporate Political Contributions and Stock Returns, *The Journal of Finance* 65, 687–724.
- Dass, Nishant, Omesh Kini, Vikram Nanda, Bunyamin Onal, and Jun Wang, 2014, Board expertise: Do directors from related industries help bridge the information gap?, *Review of Financial Studies* 27, 1533–1592.
- Defond, Mark L., Rebecca N. Hann, H. U. Xuesong, and Ellen Engel, 2005, Does the market value financial expertise on audit committees of boards of directors?, *Journal of Accounting Research* 43, 153–204.
- Duchin, R, Sosyura, D., 2012, The politics of government investment, *Journal of Financial Economics* 106, 24–48.
- Faccio, Mara, 2006, Politically Connected Firms, *American Economic Review* 96, 369–386.
- Faccio, Mara, Ronald W. Masulis, And John J. McConnell, 2006, Political Connections and Corporate Bailouts, *The Journal of Finance* 61, 2597–2635.
- Fich, Eliezer M, and Anil Shivdasani, 2006, Are busy boards effective monitors?, *The Journal of Finance* 61, 689–724.
- Fisman, Raymond, 2001, Estimating the Value of Political Connections, *American Economic Review* 91, 1095–1102.
- Goldman, Eitan, Jörg Rocholl, and Jongil So, 2009, Do Politically Connected Boards Affect Firm Value?, *Review of Financial Studies* 22, 2331–2360.
- Houston, Joel F., Liangliang Jiang, Chen Lin, and Yue Ma, 2014, Political connections and the cost of bank loans, *Journal of Accounting Research* 52, 193–243.
- I. Serdar Dinç, 2005, Politicians and banks: Political influences on government-owned banks

in emerging markets, *Journal of Financial Economics* 77, 453–479.

Jayachandran, Seema, 2006, The Jeffords Effect, *The Journal of Law and Economics* 49, 397–425.

Khwaja, A. I., and A. Mian, 2005, Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market, *The Quarterly Journal of Economics* 120, 1371–1411.

Roberts, Brian E., 1990, A Dead Senator Tells No Lies: Seniority and the Distribution of Federal Benefits, *American Journal of Political Science* 34, 31.

Shleifer, A., and R. W. Vishny, 1994, Politicians and Firms, *The Quarterly Journal of Economics* 109, 995–1025.

Vidal, Jordi Blanes I., Mirko Draca, and Christian Fons-Rosen, 2012, Revolving door lobbyists, *American Economic Review* 102, 3731–3748.

Yu, Frank, and Xiaoyun Yu, 2011, Corporate Lobbying and Fraud Detection, *Journal of Financial and Quantitative Analysis* 46, 1865–1891.

Figure 1: Timeline of Events

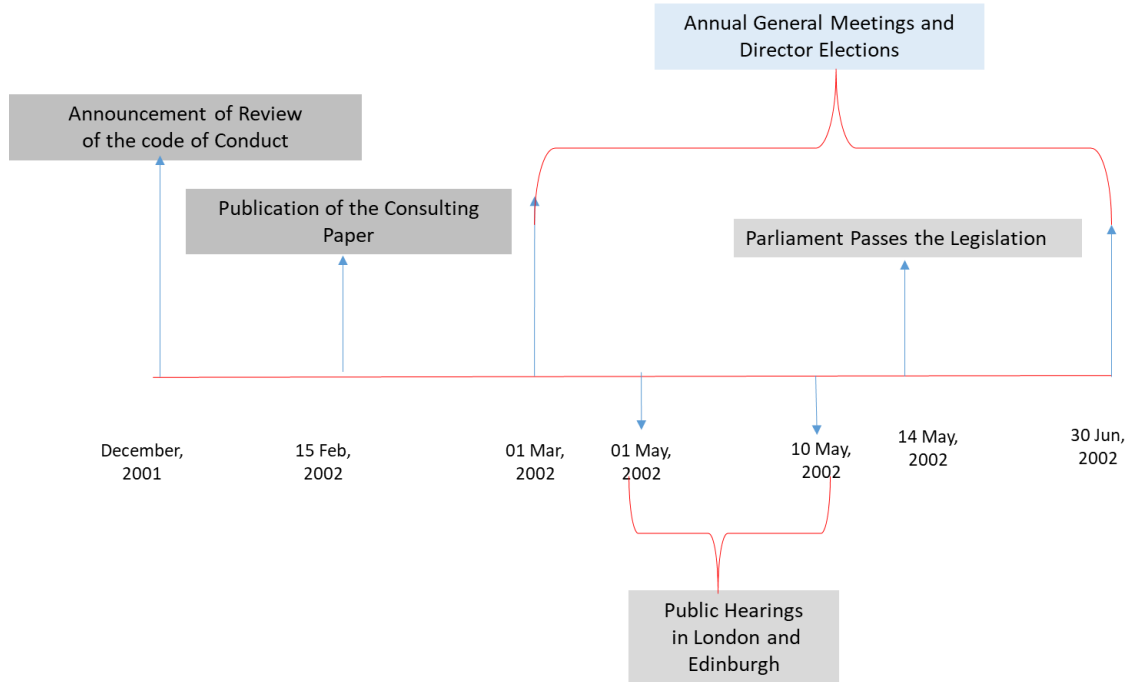


Figure 2: Distribution of different categories of directors in FTSE 350 firms in 2002.

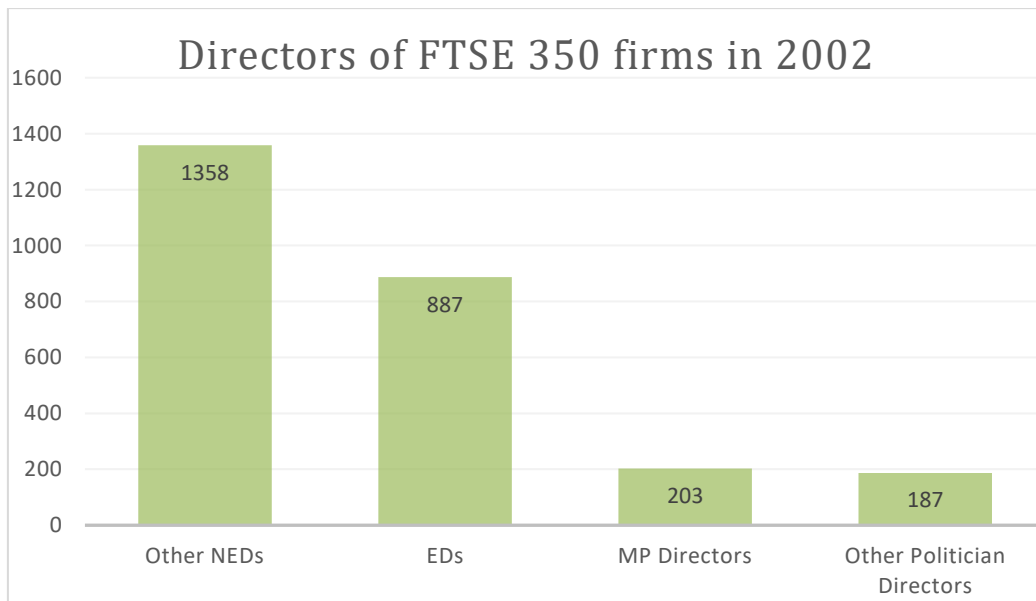


Figure 3: Abnormal Returns for Politically Connected Firms around 14th May, 2002

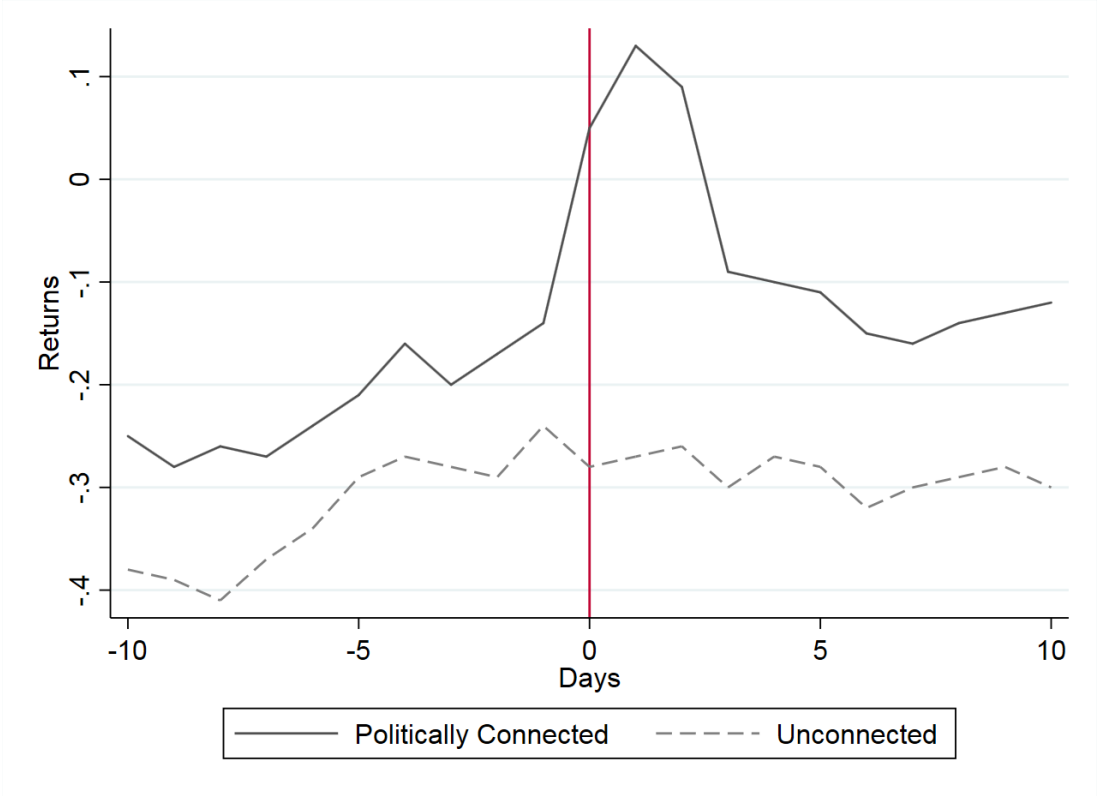


Figure 4: Political Donations around the change in parliamentary regulations (2001-2003)

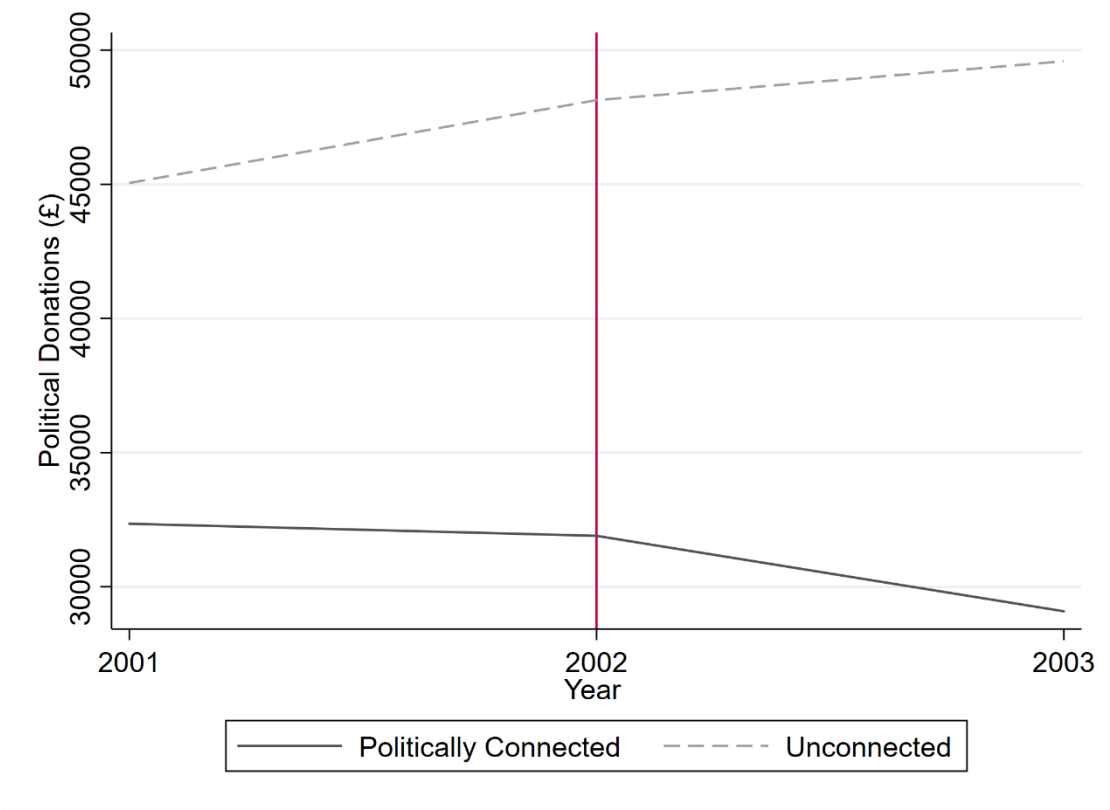


Table 1: Univariate Differences by Political Connections

We present the comparison of firms having an MP as a director or a consultant with firms having no such political connections.

VARIABLES	Politically Connected			Not Politically Connected		
	N	Mean	SD	N	Mean	SD
Political Donations (£'000)	180	20.414	10.054	158	33.277	18.902
Ln Size	180	8.578	2.494	158	7.920	1.926
ROA	180	0.098	0.089	158	0.046	0.122
MTBV	180	0.379	0.673	158	0.333	0.479
Board Size	180	9.882	2.020	158	8.935	2.875
Proportion of Independent Directors	180	0.591	0.290	158	0.540	0.255
Proportion of Female Directors	180	0.158	0.136	158	0.121	0.183
Variance in Daily Stock Returns	180	0.014	0.087	158	0.021	0.083
Leverage	180	0.212	0.150	158	0.178	0.130
Dividend Pay-Out Ratio	180	0.066	0.061	158	0.043	0.047

Table 2: The Effect of Political Connections on Firm Value: Event Study Estimates

In this table, we present the results for the market reaction to the change in regulation on Members of Parliaments outside interest. In panel A we present results for equal weighted cumulative abnormal returns (CARs) and in panel B the CARs are weighted by the value of each company. The estimation period is from day 300 to day 20 before the parliamentary legislation. The estimates presented are the difference in the CARs and the t-statistics are given in the parentheses. Politically connected firms have at least one active Member of Parliament on the board (or as a consultant) at the day of the event. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

	Panel A: Equally weighted CARs			Panel B: Value Weighted CARs		
	(+3,-3)	(+1,-1)	(0,0)	(+3,-3)	(+1,-1)	(0,0)
Politically Connected Firms	0.134*** (2.69)	0.0905*** (3.24)	0.0106* (1.85)	0.151*** (3.33)	0.122*** (3.59)	0.119** (2.11)

Table 3: Multivariate Analysis of CARs

The sample comprises our sample of firms from FTSE 350 as of year 2002. The dependent variable is CAR in the period (-3, +3) days around the change in UK parliamentary regulation on Members of Parliaments outside interest. In column 1 we present the baseline results for the value of political connections, in column 2 we add an indicator for industries that are more likely to gain from political connections, in column 3 we add an indicator for MPs connected to the firms not as a director but as a consultant and in column 4 we present results for firms connected to non-MP politicians. All specifications control for firm size, profitability, board characteristics, and industry classification, and are adjusted for heteroscedasticity. t statistics in parentheses. * p<0.1, ** p<0.05, *** p<0.01

	(1)	(2)	(3)	(4)
Politically Connected Firms	0.089*** (3.08)	0.044*** (3.60)		
Industries with exposure		0.043*** (3.15)		
Non-Consultant MP Appointments			0.075*** (3.34)	
Firms with Other Political Connections				0.012 (1.38)
Control Variables	Yes	Yes	Yes	Yes
Industry dummies	Yes	No	Yes	Yes
Constant-	0.082*** (2.80)	0.086 (2.15)	0.016 (1.35)	0.102* (1.84)
R^2	0.184	0.111	0.134	0.084
N	338	338	338	338

Table 4: Effect of Regulation Change on Firm Value, Difference in Difference Estimates

We present the difference-in-difference in profitability for firms connected to MPs vs unconnected firms, 12-months before and 12-months after the change in parliamentary regulations. The unconnected group are firms with no political connections of any form. t statistics in parentheses.

* p<0.1, ** p<0.05, *** p<0.01

	MTBV	TSR	ROA
	(1)	(2)	(3)
Politically Connected	0.124** (2.34)	0.163*** (2.96)	0.103 (1.32)
Control Variables	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes
Number of Observations	1,014	1,014	1,014
R^2	0.26	0.23	0.20

Table 5: Difference-in-Difference Estimates for Firms with Other Political Connections

We present the difference-in-difference in profitability for firms connected to non-MP politicians' vs unconnected firms, one year before and one year after the change in parliamentary regulations. All specifications control for firm size, profitability, board characteristics, and industry classification. t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Dependent Variables	MTBV	TSR	ROA
	(1)	(2)	(3)
Other Politically Connected Firms	0.008 (0.89)	0.007 (0.87)	0.013 (1.01)
Control Variables	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes
Number of Observations	1,014	1,014	1,014
R ²	0.178	0.172	0.206

Table 6: Anticipation Effects and Alternate Dates

In this table, we present the results for the anticipation effects around the publication of the consulting paper (panel A) and the public hearings before the regulation change (panel B). The CARs are weighted by the value of each company. The estimation period is from day 300 to day 7 before the events. The estimates presented are the difference in the CARs and the t-statistics are given in the parentheses. Politically connected firms have at least one active Member of Parliament on the board (or as a consultant) at the day of the event. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

	Panel A: Publication of the Consultation paper			Panel B: Public Hearings		
	(+3,-3)	(+1,-1)	(0,0)	(+3,-3)	(+1,-1)	(0,0)
Politically Connected Firms	0.007**	0.005**	0.003*	0.000	0.000	0.000
	(2.99)	(3.11)	(1.92)	(1.78)	(1.69)	(1.77)

Table 7: Probability of Appointing MPs before and After the Regulation Change

In this table, we present the likelihood of politicians getting a corporate affiliation before and after the change in regulation of 14 May 2002. We estimate the likelihoods of MPs, MPs without prior corporate affiliations and MPs in parliamentary Committees. All specifications control for firm size, profitability, board characteristics, and industry classification. t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

	Before Regulation			After Regulation		
	(2000-2001)			(2003-2004)		
	(1)	(2)	(3)	(4)	(5)	(6)
MPs	0.012**			0.023***		
	(1.99)			(2.85)		
MPs w/o prior Affiliation		0.009**			0.019***	
		(2.06)			(3.01)	
MPs in Parliamentary Committees			0.000			0.000
			(0.089)			(0.064)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.161	0.159	0.010	0.189	0.176	0.011
N	1300	1137	566	1300	1097	559

Table 8: Announcement Effects Before and After the Regulation Change

In this table, we present the announcement returns for politicians on corporate boards, before and after the parliamentary regulation change. In columns 2 and 4, we present the announcement returns for a sample of 100 randomly selected other non-executive director appointments as benchmarks. All specifications control for firm size, profitability, board characteristics, and industry classification. t-statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

	Before Regulation Change		After Regulation Change	
	(2000-2001)		(2003-2004)	
	(1)	(2)	(3)	(4)
	(-1, +1)	(-1, +1)	(-1, +1)	(-1, +1)
Politicians	0.047**		0.078***	
	(1.97)		(3.21)	
Other NEDs		0.023**		0.030***
		(1.98)		(2.86)
Control Variables	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
R ²	0.161	0.133	0.218	0.209
N	114	100	135	100

Table 9: Effect of Regulation Change on Political Donations

We present the difference-in-difference in political donations of firms connected to MPs vs unconnected firms, before and after the change in parliamentary regulations. The unconnected group are firms with no political connections of any form. In column 3, we present difference in differences results for firms with other forms of political connections. In all the specifications, we use donations information for the period 2001-2003. t-statistics in the parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

	Dependent Variable: Ln Political Donations	
	(1)	(2)
Politically Connected	-0.171** (2.31)	
Other Political Connections		-0.124** (2.08)
Controls	Yes	Yes
Number of Observations	786	786
R^2	0.139	0.144

Appendix Table A1: Descriptive Statistics

In this table, we present the summary statistics for the main variables of the sample of FTSE 350 firms as of the year 2002.

VARIABLES	N	Mean	Median	Std. Dev.
MP-Directors	338	0.601	0.536	0.327
Other Politician-Directors	338	0.553	0.325	0.280
Political Donations ('000 £)	308	25.97	10.22	13.91
Ln Size	338	8.353	8.169	2.211
ROA	338	0.06	0.083	0.114
MTBV	338	0.358	0.330	0.526
Board Size	338	9.301	8.000	2.672
Proportion of Independent Directors	338	0.553	0.472	0.267
Proportion of Female Directors	338	0.134	0.126	0.175
Variance in Daily Stock Returns	338	0.019	0.014	0.081
Leverage	338	0.193	0.151	0.139
Dividend Pay-Out Ratio	338	0.052	0.009	0.054

Appendix Table A2: Event Study Estimates by Party Affiliation of MPs

In this table, we present the results for the market reaction to the change in regulation on Members of Parliaments outside interest. In panel A we present results for equal weighted cumulative abnormal returns (CARs) and in panel B the CARs are weighted by the value of each company. The estimation period is from day 300 to day 20 before the parliamentary legislation. The estimates presented are the difference in the CARs and the t-statistics are given in the parentheses. Politically connected firms have at least one active Member of Parliament on the board (or as a consultant) at the day of the event. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

	Panel A: Equally weighted CARs			Panel B: Value weighted CARs		
	(+3,-3)	(+1,-1)	(0,0)	(+3,-3)	(+1,-1)	(0,0)
Conservative MPs - Labour MPs	0.062** (2.10)	0.045* (1.94)	0.022* (1.88)	0.081** (2.25)	0.053** (2.12)	0.031** (2.03)

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